

priority mapping according to packet delay budget; a dynamic mapping scheme; or a GBR/Non-GBR (guaranteed bitrate/non-guaranteed bitrate) only scheme.

[0081] Determining whether the offload from the first network to the second network should be performed may be further based on: a traffic profile; a QoS measurement; or a QoS measurement resulting from causing dummy packets with traffic characteristics that are the same as the data flow to be transmitted to the second access point, and causing the QoS of the transmitted dummy packets to be measured.

[0082] The remedial action may include causing the data flow to be transferred back to the first access point or causing the second access point to adaptively maintain the desired QoS threshold by modifying one or more parameters.

[0083] (2) An apparatus comprising at least one processor and at least one memory including program code instructions, the at least one memory and the program code instructions being configured to, with the processor, direct the apparatus to at least determine, based at least in part on a QoS (Quality of Service) mapping scheme, whether a data flow should be offloaded from a first access point to a second access point; and, in an instance in which it is determined that the offload should be performed: cause the data flow to be offloaded to the second access point according to the QoS mapping scheme, cause a perceived QoS of the data flow to be monitored, and, in an instance in which the perceived QoS does not satisfy a predetermined desired QoS threshold, cause a remedial action to be performed.

[0084] The aforementioned mapping scheme may be a mapping scheme in accordance with Table 3; a sequential priority mapping according to packet delay budget; a dynamic mapping scheme; or a GBR/Non-GBR (guaranteed bitrate/non-guaranteed bitrate) only scheme.

[0085] The apparatus may be caused to determine whether the offload from the first network to the second network should be performed further based on: a traffic profile; a QoS measurement; or a QoS measurement resulting from causing dummy packets with traffic characteristics that are the same as the data flow to be transmitted to the second access point, and causing the QoS of the transmitted dummy packets to be measured.

[0086] The remedial action may include causing the data flow to be transferred back to the first access point or causing the second access point to adaptively maintain the desired QoS threshold by modifying one or more parameters.

[0087] (3) A computer program product comprising a non-transitory computer readable medium storing program code portions therein, the computer program code instructions being configured to, upon execution, direct an apparatus to at least determine, based at least in part on a QoS (Quality of Service) mapping scheme, whether a data flow should be offloaded from a first access point to a second access point; and, in an instance in which it is determined that the offload should be performed: cause the data flow to be offloaded to the second access point according to the QoS mapping scheme, cause a perceived QoS of the data flow to be monitored, and, in an instance in which the perceived QoS does not satisfy a predetermined desired QoS threshold, cause a remedial action to be performed.

[0088] The aforementioned mapping scheme may be a mapping scheme in accordance with Table 3; a sequential priority mapping according to packet delay budget; a dynamic mapping scheme; or a GBR/Non-GBR (guaranteed bitrate/non-guaranteed bitrate) only scheme.

[0089] The program code portions may also be configured to, upon execution, cause the apparatus to determine whether the offload from the first network to the second network should be performed further based on: a traffic profile; a QoS measurement; or a QoS measurement resulting from causing dummy packets with traffic characteristics that are the same as the data flow to be transmitted to the second access point, and causing the QoS of the transmitted dummy packets to be measured.

[0090] The remedial action may include causing the data flow to be transferred back to the first access point or causing the second access point to adaptively maintain the desired QoS threshold by modifying one or more parameters.

[0091] (4) An apparatus comprising: means for determining, based at least in part on a QoS (Quality of Service) mapping scheme, whether a data flow should be offloaded from a first access point to a second access point; and means for, in an instance in which it is determined that the offload should be performed: causing the data flow to be offloaded to the second access point according to the QoS mapping scheme, causing a perceived QoS of the data flow to be monitored, and, in an instance in which the perceived QoS does not satisfy a predetermined desired QoS threshold, causing a remedial action to be performed.

[0092] The aforementioned mapping scheme may be a mapping scheme in accordance with Table 3; a sequential priority mapping according to packet delay budget; a dynamic mapping scheme; or a GBR/Non-GBR (guaranteed bitrate/non-guaranteed bitrate) only scheme.

[0093] The means for determining whether the offload from the first network to the second network should be performed may be further configured to make the determination based on: a traffic profile; a QoS measurement; or a QoS measurement resulting from causing dummy packets with traffic characteristics that are the same as the data flow to be transmitted to the second access point, and causing the QoS of the transmitted dummy packets to be measured.

[0094] The remedial action may include causing the data flow to be transferred back to the first access point or causing the second access point to adaptively maintain the desired QoS threshold by modifying one or more parameters.

[0095] The (1) method, (2) apparatus, and (3) computer program product described above may, for example, be deployed in a system in which the first access point comprises a base station associated with a cellular network, such as an LTE network, and the second access point comprises a wireless access point associated with a WLAN.

1-33. (canceled)

34. A method comprising:

determining, based at least in part on a QoS (Quality of Service) mapping scheme, whether a data flow should be offloaded from a first access point to a second access point; and,

in an instance in which it is determined that the offload should be performed:

causing the data flow to be offloaded to the second access point according to the QoS mapping scheme, causing a perceived QoS of the data flow to be monitored, and,

in an instance in which the perceived QoS does not satisfy a predetermined desired QoS threshold:

causing a remedial action to be performed.

35. The method of claim 34, wherein the mapping scheme comprises a mapping scheme in accordance with Table 3.